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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,478	08/17/2001	Titus Kaletta	D0590/7019	4784
23628	7590	11/26/2004	EXAMINER	
WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			KAUSHAL, SUMESH	
		ART UNIT	PAPER NUMBER	
		1636		

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/857,478	KALETTA ET AL.
	Examiner	Art Unit
	Sumesh Kaushal Ph.D.	1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 October 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 116-133 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 116-133 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/04 has been entered.

Claims 116-133 are pending and are examined in this office action.

Applicants are required to follow Amendment Practice under revised 37 CFR §1.121. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The references cited herein are of record in a prior Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 117-118 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As MPEP 2163.06 notes “ If new matter is added to the claims, the examiner should reject the claims under 35 U.S.C. 112, first paragraph - written description requirement. In re Rasmussen, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981).” In instant case the applicant fails to point out where in the specification there is support for claim limitation “uniform description”. So claims 117-118 are apparently new matter. No pages or place in the specification was cited to support this amendment. A careful review by the examiner of the specification failed to identify any support for this new limitation. Since no basis has been found to support the new claim limitation in the specification, the claims are rejected as incorporating new matter.

Claims 117-118 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 117 and 118 are indefinite because it is unclear what is the criterion that defines “uniform description” in this context. For example the metes and bounds of “uniform description” which could be applied are not defined in this context.

Claim Rejections - 35 USC § 103

Claims 116-133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gottlieb et al (Genetics 137: 107-120, 1994, ref of record) in view of Martinelli et al (Semin. Cell Dev Biol. (5):459-67, 1997) for the same reasons of record as set forth in the office action mailed on 02/12/04.

Response to arguments

The applicant argues that combined teaching of Gottlieb and Martinelli does not teach every aspect of instant invention. The applicant argues that Gottlieb does not suggest comparing data on *daf* mutant and dauer formation to other phenotypes through the use of an electronic database. The applicant argues that Gottlieb does not teach measuring plurality of changed characteristics. The applicant argues that Martinelli does not suggest that its database can be used for comparative purposes to compare a phenotype profile against stored phenotypic profiles. The applicant argues that the AceDB database disclosed by Martinelli does not provide a phenotype database. The applicant concluded that combination of Gottlieb and Martinelli fails to teach the instant invention and there is no motivation to combine Gottlieb and Martinelli references.

However, applicant's arguments are found NOT persuasive. The arguments taken as a whole rely heavily on the deficiencies of each reference taken alone. One cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In instant case Gottlieb clearly teaches a method of making *C. elegans* libraries, which is based upon phenotypic profiles of the worm are generated in response to genetic mutation or compounds (i.e. SDS, pheromone concentration, food availability and temperature). Furthermore the cited art teaches measuring plurality of changed characteristics comprising phenotypic profiles based upon dauer formation, dauer bypass, pharynx remodeling, pharyngeal pumping, intestine cell color, molting cycle, body growth, body shapes, presence of ciliated sensory neurons, temperature sensitivity, gonad development, laying dead or live eggs and longevity. These phenotypic profiles clearly represent the plurality of changed characteristics in a nematode worm.

Furthermore the applicant fails to consider Martinelli's teaching in its entirety, who clearly teaches an electronic *A C. elegans database (ACeDB database)* of reference phenotypes, comprising various stages of *C. elegans* development and mutant forms (see page 461 fig-1 and 2, page 466 col.2). The cited art teaches up to 80

phenotypic patterns for a *Life-stage* during the experimental *C. elegans* development (page 462 col.2 para.3-4, page 463 fig-3). Furthermore Nomarski-images clearly encompasses the scope of invention, since the invention as claimed is not limited to adult phenotype. The cited art clearly teaches that accessory program named 'Angler' can be used to browse sectional Nomarski-images of the worm embryo during early development, and to relate these images to overlaid cell lineage data and 3-D schematic views of cell positions (see abstract). Therefore Martinelli's clearly teaches an electronic data that contains various phenotypes associated with *C.elgana* development and/or mutations.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law (See MPEP 2144). In instant case compiling an information in an electronic format is considered obvious in view of state of the electronic database art.

Therefore considering the combined teaching of Gottlieb and Martinelli it would have been obvious to one ordinary skill in the art at the time of filing to modify the method of Gottlieb who teaches a method for screening compounds and selection of *C. elegans* libraries based upon phenotypic profiles by incorporating the phenotypic information into an electronic database as taught by Martinelli. One would have been motivated to do so because electronic data bases provides easy access to the stored information. One would have a reasonable expectation of success, since ACeDB database was readily available at the time of filing. Thus the invention as claimed is *prima facie* obvious in view of cited prior art of record.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumesh Kaushal Ph.D. whose telephone number is 571-272-0769. The examiner can normally be reached on Mon-Fri. from 9AM-5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yucel Irem Ph.D. can be reached on 571-272-0781.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

Sumesh Kaushal
Examiner GAU 1636



SUMESH KAUSHAL
PATENT EXAMINER